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Illinois Coastal Management Program
Issue Paper

Waukegan Harbor, Waukegan Lakefront and Waukegan River Watershed

Introduction

The Waukegan Harbor and Lakefront and the Waukegan River Watershed were identified as areas meriting special attention in developing a Coastal Management Program for Illinois. Waukegan is rich in history and possesses unique ecological resources. The lakefront ecosystem is an example of a classic Lake Michigan dune system providing areas of unique and high quality habitat. The Waukegan River, second largest of Illinois' Lake Michigan watersheds, is now making a comeback. In fact, previous Clean Water Act Section 319 funding projects on the Waukegan River were cited by the IEPA as a success story as a result of stream stabilization, in-stream habitat enhancement, wetland restoration, and resource management efforts made by local and government officials.

Waukegan Harbor staff laid the groundwork for the renovation of the South Marina docks. The City of Waukegan prepared a Lakefront—Downtown Master Plan with a vision for transforming and developing the area consistent with national trends that support central city living, ecological restoration, and sensitive redevelopment. The plans and efforts are consistent with the policies of the Illinois Coastal Management Program (ICMP), which can provide assistance and serve as another tool and opportunity in meeting the vision plan and goals for ecological restoration and economic development in the Waukegan area.

Waukegan Harbor

Waukegan Harbor is located on the west shore of Lake Michigan in Waukegan about 38 miles north of Chicago. The initial creation of Waukegan Harbor began in the 1880s and developed into its present configuration in 1968. The harbor is protected by a 1,894 feet long outer breakwater and two parallel piers. The north pier is 998 feet in length and the south pier is 3,225 feet in length. The harbor also includes a 390 feet wide by 22 feet deep navigation channel from Lake Michigan to the north pier head and a 200 feet wide by 18 feet deep channel between the piers leading into the inner basin. The inner basin is 18 feet deep and covers 13 acres in area. The dredging of shoaled material from the outer harbor channel was completed in October 2003. Principal commodities entering the harbor include recycleable gypsum residue and cement. The south harbor is a popular recreational site with a 1,000-slip marina. (Source: http://www.lrc.usace.army.mil/co-o/Wauk_hbr.htm)

In 1975, polychlorinated biphenyls (PCBs) were discovered in Waukegan Harbor sediments. Bioaccumulation of PCBs found in the heavily contaminated harbor sediments led to contamination of fish that resided in Waukegan Harbor. In response to the discovery of elevated levels of PCBs in the fish tissue, warning signs were placed at the harbor to warn the public not to consume Waukegan Harbor fish. Subsequent investigation of the harbor linked contaminated sediments in Waukegan Harbor to manufacturing activities at Outboard Marine Corporation (OMC). Hydraulic fluids containing PCBs were discharged through floor drains at the OMC plant and were released to Waukegan Harbor and to a drainage ditch north of the plant. The site was added to the National Priorities List in the early 1980s.

In 1981, the U.S. and Canadian governments identified Waukegan Harbor as one of 43 Areas of Concern (AOCs) or severely degraded geographic areas located within the Great Lakes Basin. The discovery of

PCBs in Waukegan Harbor sediments prevented dredging of the primary navigational channels from 1975 to 1992. The Superfund Program allowed dredging of Waukegan Harbor in 1992 and 1993 when 1 million pounds of PCBs were removed from the Waukegan Harbor AOC.
(Source: http://www.epa.gov/grtlakes/aoc/waukegan.html)

The USEPA describes the cleanup of Waukegan Harbor as one of the most significant accomplishments of the federal Superfund program. The following two paragraphs are taken from the United States Department of State and the USEPA Response to Recommendations in the International Joint Commission's 9th Biennial Report on Great Lakes Water Quality:

"The reduction in risk to human health achieved under the Superfund Program in the Waukegan Harbor AOC has not received optimal public exposure. The International Joint Commission recommends additional effort be devoted to properly informing citizens and politicians of this notable success."

"The U.S. is proud of the coordinated actions which led to the removal of almost 1,000,000 pounds of PCBs from the Waukegan Harbor AOC. PCBs are one of the compounds largely responsible for fish consumption advisories in the Great Lakes. This removed mass represented the largest single source of PCBs in the Great Lakes. This significant environmental improvement was covered by the local media and was highlighted in numerous reports from the USEPA and the Illinois EPA as well as the Waukegan Harbor Citizen Advisory Group. . . . The U.S. agrees that such important success stories should be given a high level of public exposure. We will explore additional methods for publicizing the reductions in risk to human health achieved under the Superfund Program at this and other sites."
(Source: http://www.epa.gov/glnpo/glwqa/ijc9th/index.html)

The Superfund cleanup achieved the 50-ppm cleanup standard for PCBs then in effect, achieving an average concentration of PCBs in sediments of approximately 2.5 ppm. Since completion of the Superfund cleanup, the standard for PCBs in sediment has been lowered from 50 ppm to less than 1 ppm. The presence of PCBs at a concentration of greater than 1 ppm has prevented the harbor from being delisted as an Area of Concern by the International Joint Commission[1].

Throughout 2005, Waukegan Harbor staff laid the groundwork for the renovation of the South Marina docks, coordinating the environmental, design and financial efforts. In 2006, efforts accelerated with the introduction of the slip size mix planning. Permits have been applied for to construct new docks. Phase one of the project was expected to begin in the fall of 2007.

Waukegan Lakefront

Waukegan has a prized lakefront location on Lake Michigan, and an expanding city population in a growing Lake County that is itself part of the dynamic northern Illinois region. With commuter rail service through the North Shore communities to Chicago, an active marina and harbor, strong neighborhoods, and Illinois Beach State Park to the north, Waukegan has many of the elements necessary for success. Once the source of thousands of jobs, Waukegan's lakefront is marked by its industrial legacy. Some of the land was environmentally compromised by its manufacturing past. A small number of lakefront businesses remain, offering only a fraction of the number of previous jobs. Material storage

[1] Two beneficial uses of the harbor are impaired (BUIs) by the presence of PCBs in concentrations greater than 1 ppm: restrictions on fish and wildlife consumption and restriction on dredging activities. The other four beneficial use impairments of the Expanded Study Area (ESA) for the Waukegan Harbor Area of Concern (beach closings, degradation of benthos, degradation of phytoplankton and zooplankton populations and loss of fish and wildlife habitat) do not relate to contaminated sediments in the harbor. The BUIs in the ESA unrelated to the harbor sediments should not prevent Waukegan Harbor from being delisted as an AOC.

operations are clustered around the harbor. The framework of rail and road infrastructure and land parcels also reflects this industrial past. Much of the lakefront is separated from the rest of Waukegan by a bluff and the Amstutz Expressway, a one-and-one-half mile highway that lies at its base. Waukegan's downtown declined as local industrial jobs had been lost. The strong base of downtown county government and court-related jobs had not been sufficient to support a once booming retail district. Office users left and downtown housing and hotels had fallen into disrepair. An active daytime government center had become surrounded by surface parking lots, a struggling retail sector and under-utilized buildings. (*A 21st Century Vision for Waukegan's Downtown and Lakefront*—Downtown Master Plan Summary Report July 2003 http://www.waukeganvision.com/pdf/WAUKbook.pdf)

On December 22, 2000, Outboard Marine Corporation (OMC) filed for bankruptcy. This corporation was the last large employer on the lakefront and owner of over 100 aces of land strategically located around the Waukegan Harbor and along the lakefront. The City was forced to make some hard decisions about the future of the lakefront. The City realized the OMC bankruptcy presented an opportunity to redevelop the lakefront and took the following actions:

- On November 12, 2001, the City adopted an ordinance authorizing the taking of OMC property by eminent domain.

- In February 2002, the City and the Urban Land Institute (ULI) brought some of the nation's leading development experts to Waukegan for a one-week investigation of options for the future of the lakefront. In addition to brainstorming ideas, this panel also recommended a non-industrial future for the majority of Waukegan's lakefront and strongly urged the creation of a full Master Plan to create a vision and action agenda for implementation.

- On April 11, 2002, the City filed an objection to the Settlement Agreement between OMC and General Motors and North Shore Gas Company (the "PRPs"), the parties responsible for the cleanup of a 34 acre parcel owned by OMC known as the "Coke Plant Site". The Settlement Agreement would have limited the future use of the Coke Plant Site to "industrial/commercial" uses.

- On April 23, 2002, the bankruptcy court entered an Order approving the sale of the Coke Plant Site to the City of Waukegan over the objection of the PRPs.

- On September 16, 2002, after taking title to the property, the City rezoned the Coke Plant Site from an industrial to a residential zoning classification.

- On October 21, 2002, the City enacted the Waukegan Solid Waste Nuisance Ordinance, which mandated residential cleanup levels on all lakefront property, the first ordinance of its type in the State of Illinois. The Ordinance declared a "public nuisance" all soil within Lakefront Redevelopment Zone (the lakefront) contaminated above residential cleanup standards. The purpose of the Ordinance is to ensure that the Coke Plant Site and other lakefront properties are cleaned to a level that will allow land use contemplated by ULI and later the Master Plan (as opposed to less stringent industrial cleanup standards).

- In January 2003, following a national search for a planning team in the fall of 2002, the City of Waukegan embarked on the creation of a Master Plan for Waukegan's downtown and lakefront. Over the next eight months, the City hosted almost 30 public meetings to solicit input from the public about the future of Waukegan's lakefront and downtown. The public

overwhelmingly supported a non-industrial future, instead preferring residential and recreational uses on the lakefront.

- On May 18, 2003, the USEPA issued a "special notice" letter to the City—threatening the City with litigation if it did not go along with the industrial cleanup of the Coke Plant Site.

- In August 2003, the City Council adopted the Master Plan, "A 21st Century Vision for Waukegan's Downtown and Lakefront: Lakefront—Downtown Master Plan."

- On August 5, 2004, the USEPA, the IEPA, the PRPs and the City entered into a settlement agreement allowing for residential redevelopment of the Coke Plant Site.

The City was confronted with yet another challenge when on December 10, 2002 the bankruptcy court authorized OMC to "abandon" (walk away from) the OMC north plant property. The City immediately began to negotiate a consent decree with the USEPA and the IEPA that would allow the City to take title to the north plant. The City realized that it had to exercise control over this property. At the same time, the City did not want to assume liability for the cleanup of the north plant. On June 23, 2005, the City entered into a settlement agreement with the IEPA and the USEPA that enabled the City to take control of the property.

While the lakefront and downtown present challenges, the opportunities are greater. Waukegan's downtown is moving quickly to build on national trends that support central city living, working, learning, shopping and entertainment. Waukegan's lakefront can become an international model for ecological restoration and sensitive redevelopment. Both the lakefront and downtown can build on the economic strength of the region and the commitment to create a new future shown by Waukegan's citizens and leaders both for themselves and for others. Transformation of Waukegan's lakefront and downtown will be driven by the projected development of up to 4,000 new homes and a combined 1,000,000 square feet of new retail, hospitality, entertainment, education and cultural activity. This transformation will provide new options and opportunities for today's residents of Waukegan and for the residents of the future. Waukegan's Master Plan was the recipient of the 2005 Burnham Award from the Metropolitan Planning Council, as well as the 2005 internationally competitive, Congress for the New Urbanism Award of Excellence.

On April 15, 2004, the Waukegan City Council voted unanimously to reject a proposal by the Army Corps of Engineers (USACE) to dredge Waukegan Harbor and place PCB contaminated sediments in the Yeoman Creek Landfill, a federal Superfund site. In addition to the concern over the safety of placing the PCB sediments at the landfill, the City Council expressed concern that the USACE dredging project would open the harbor to more industrial shipping at a time when the City is attempting to redevelop the harbor as a mix of recreational, commercial and residential uses. On May 7, 2007, the City Council again voted unanimously to reject a deep industrial harbor. The May 7 resolution endorsed an environmental dredging of the Waukegan Harbor on the condition federal legislation is enacted that would transform the harbor from an industrial to a recreational harbor. Sixty-five percent of the cost of the environmental dredging project would be funded by the Great Lakes Legacy Act. The City is working with its Congressional delegation on federal legislation that will enable the City to move forward with an environmental dredging of the harbor.

In the first three years of implementing the Master Plan, the City of Waukegan invested over $40 million in improvements including new construction of municipal buildings, renovation of the historic Genesee Theatre, and implementation of a phased streetscape program. Additionally, the City stimulated private investment in the downtown area through several public/private partnerships and launched two implementation strategy initiatives focused on downtown parking and open space. Attention to the

lakefront focused on pre-development activities including infrastructure engineering, environmental remediation, and open space planning.

Waukegan River Watershed
(Adapted from W. P. White; Draft Report, 2007 and IEPA/USEPA Project Report Updates)

The 7,640-acre watershed of the Waukegan River is comprised of a South Branch and a North Branch collectively about 12.5 miles long and draining directly into Lake Michigan. Land uses predominantly consist of residential (50% and growing), agricultural (13% and decreasing), commercial (8%) and industrial (3%). The river has a steep gradient and flows from 730 msl to 580 msl, with the steepest lands located in Washington and Powell Parks.

The watershed is largely urbanized, with over 80% of the City of Waukegan lying within the watershed boundaries. There are over 90,000 people living in Waukegan. Because this is an older town, there are very few stormwater detention basins. Therefore, there is little control over stormwater discharge (quantity or quality) resulting in flashy runoff rates and heavy stormwater pollutant loads. Sediment was the main pollutant. Water quality concerns also included cross-connections between sanitary and storm sewers, hydraulic undermining of the sanitary and storm sewers, potential sanitary sewer overflows during wet weather, severe streambank erosion, channel incision and artificial lining. In addition to the physical destruction, the urban fisheries and stream habitat were highly degraded at the onset of this project and the system exhibited impairments due to lack of water depth in pools, limited cobble substrates and limited stream aeration.

In the fall of 1992, streambank stabilization was completed on two streamside City parks, Powell and Washington. City and Park District staff were offered a workshop on implementation techniques used in stabilizing streambanks.

The Waukegan River Section 319 National Monitoring Program project was implemented in 1994 and was designed to demonstrate the effectiveness of stream restoration techniques. The project period lasted from 1994 to 2004 and was completed by a partnership of organizations. Partnership organizations associated with this project included the USEPA (Region V), the IEPA, the IDNR (Office of Scientific Surveys and Analysis; State Water Survey Division and Office of Resource Conservation; Fisheries Division), the University of Illinois at Champaign-Urbana, local contractors and the City of Waukegan (Waukegan Park District, Waukegan Public Works Department). The USEPA (Region V) funded the project, the IEPA served as Contract Administrator and the Illinois State Water Survey, an affiliate of the University of Illinois, served as Project Director and Principal Investigator. The local contractor, the Waukegan Park District, and the Waukegan Public Works Department helped with project implementation and construction of restoration sites.

The objectives were to specifically demonstrate that biotechnical streambank stabilization techniques can be more cost-effective than traditional armoring approaches alone and that these techniques work well in conjunction with an array of innovative implementation strategies in reducing erosion and providing additional water quality and instream habitat benefits. Another objective was to show that rock riffles and pools add to the in-stream physical diversity, which in turn leads to increased biodiversity and ecosystem sustainability. In addition to enhancing habitat, it was an objective to show that riffles and pools can be effective in reducing erosion of the streambed thereby improving stream stability and increasing water aeration.

Stream channel erosion was controlled with vegetative stabilization, structural stabilization and habitat improvement structures. Lunkers (crib-like, wooden structures installed along the toe of a stream bank to create overhead bank cover and resting areas for fish), A-Jacks (concrete revetment, typically made up of three

two-foot long cement stakes joined at the middle making six one-foot legs), stone, dogwoods, willows and grasses were used to stabilize severely eroded banks. A series of pool-and-riffle complexes were recreated by the construction of low stone weirs from granite boulders in a channelized reach. An upstream/downstream habitat monitoring design was employed to document impacts of instream and streamside habitat restoration improvements in a control area versus an area where habitat was restored. The upstream/downstream design was selected because urban water quality is more likely to affect biological conditions of both the upstream control and the downstream rehabilitated stations uniformly. Therefore, instream and streamside habitat improvements may provide biological benefits that are detectable if the water quality is not an overriding, limiting factor. Stream flow was monitored by using a 4150 ISCO Flow Logger which was installed during the spring of 1995. The urban fisheries and stream habitat were surveyed before implementation of the stream restoration techniques. Stream fisheries and in-stream habitat have been and continue to be surveyed to provide post-restoration data. The monitoring strategy includes macro-invertebrate sampling, physical habitat monitoring and fisheries monitoring during the spring, summer and fall seasons of the project period.

The monitoring scheme was highly integrated with the implementation efforts. Monitoring began in 1994 prior to most restoration activities on the South Branch although restoration activities also began later in that same year and continued through 1996. Monitoring continued on the South Branch from 1996-2004. Monitoring also began in 1994 along with restoration activities on the North Branch and post restoration monitoring occurred from 1995-2004. Lunkers and A-Jacks were installed in Powell Park and Lunkers with Stone were installed in Washington Park on the North Branch. Willows, dogwood, grasses and wetland plants were planted in the lower, middle and upper zones of the stream banks where Lunkers were installed. Two sampling stations, N1 and N2, were established for background data collection. Lunkers, A-Jacks, stone, dogwoods, willows and grasses were used to stabilize a severe streambank erosion site on the South Branch of the Waukegan River. Smaller bank erosion sites were stabilized with coir coconut fiber rolls, willows and grasses. Because the original bank stabilization efforts did not significantly increase stream depth, in the winter of 1996, a series of six pool and riffles were installed by constructing low stone weirs from granite boulders in this channelized reach.

The monitoring indicated that the project goals were accomplished; however, it was clear to the Illinois State Water Survey that stabilizing the streambanks and streambed and enriching instream and streamside habitat (including increasing depth of pools and aeration of the stream) alone are not sufficient to maintain water quality and stable biotic communities. Pervasive water quality impacts and associated issues remain. Land use has changed since the initiation of this project but impacts from these specific changes are not entirely known at this time. The instream and streamside restoration efforts have improved biological indices in general and researchers from the Illinois State Water Survey indicate that stakeholders must now look for impacts from continued peak flows and pervasive water quality/water chemistry impairments. Sondes, which measure PH, turbidity, DO, temperature, etc., were installed by the Illinois State Water Survey in 2004 and operated up through 2006. The Illinois State Water Survey further indicated that detailed land use maps should be updated. A more detailed chemical analysis is also needed to further "pinpoint" the water chemistry problems that exist.

Overall, the project clearly showed that naturalization of stream channel morphology and enhancement of habitat does improve biological diversity, at least temporarily, but sustaining biological diversity is not necessarily achievable by those efforts alone in this watershed. More comprehensive conservation applications are required in the Waukegan River watershed to address other systemic problems relating more specifically to water quality impairments and hydrologic discharge extremes. It is clear that in the case of the Waukegan River watershed, there is a need to innovatively update sewage and stormwater infrastructure and maintenance operations as well as adopt comprehensive plans and management ordinances that implement and enforce alternative conservation practices that infiltrate and purify stormwater.

Issues of Concern

The following issues meriting special attention in the ICMP Waukegan watershed were identified from a questionnaire:

a. Beach cleanups are needed especially in Waukegan. One commenter mentioned that there is lots of garbage on the beach and that garbage bins are not picked up year round, only during the swim season. Discharge from North Shore Sanitary District's 2nd outfall has caused large algae blooms and some beach erosion along the shoreline.

b. Water Quality - Promote goals established within the Water Agenda that promote water quality improvement in rivers and streams that feed into or are connected to the lake. Remove pollutants and reduce erosion from the Waukegan River. Large pond created by North Shore Sanitary effluent beach erosion.

c. Unique Habitat - Undeveloped coastal areas immediately north of Chicago to Wisconsin state line provide unique habitat that supports some of the rarest of the state's threatened and endangered plant and animal species. The greatest concentration of these rare habitats can be found at Illinois Beach State Park, portions of Waukegan Beach, Johns Manville and the Midwest Generation Power Plant.

d. Public Access - When asked about the need for increasing the opportunity for general public use and access to the lakefront, one commenter wrote that while there are certainly needs for access to lakefront recreational opportunities, it's important to limit such use to areas where public access and potentially destructive activities will not come in conflict. Especially true for sensitive and highly erodible remaining examples of high quality natural communities and cited the undisturbed portions of Waukegan Beach and shoreline around the Johns-Manville/Midwest Generation facilities. These remnants of Lake Michigan's natural legacy should not be sacrificed to provide for public beaches, boat access, ATV or other potentially destructive activities. Recreational activities, which may be compatible with natural resource protection in some of these areas, include birding, photography, hiking, cross-country skiing, and biking on existing trails and roads. Regional bicycle and hiking trails should be a priority. Areas included in the Designated Critical Habitat for Piping Plover or containing other sensitive natural resources should be avoided and protected from potentially destructive human activities.

Another commenter wrote about a long stretch of beach between the Waukegan North Beach and Midwest Generation Plant that is hard to access during cool weather since you have to wade over the discharge from the North Shore Sanitary District. A footbridge over this channel far enough back from the beach to avoid damage from sand migration would be very helpful. The commenter also mentioned a small footbridge (is needed) over the North Ditch by OMC. Woodchips on the gravel path west of the dunes would allow bike and foot traffic.

ICMP Opportunities

The following are responses from a questionnaire asking to describe opportunities that may develop under the ICMP and to cite examples of projects or study areas, which may be good candidates for ICMP grant assistance:

1. Numerous activities identified in Waukegan's Master plan such as ravine restoration, public access to the waterfront, boat launch improvements, harbor dredging, seawall reconstruction, wetlands construction/restoration.

2. Clean up of Ravines and Waukegan River.

3. Waukegan Ravines turned over to a land grant program such as the Nature Conservancy.

4. Waukegan River Restoration Project—IL State Water Survey, IEPA (319 grant), and the Waukegan Park District.

5. Many natural studies have already been done. As a nearby resident, I would like to see a bike/hiking trail along the Lake Michigan Shoreline since there is limited access at this point. I would especially like to see access from Waukegan's Government Pier north to the Illinois Beach State Park. This would involve several bridges and could connect with the Illinois Beach State Park trail system.

The following excerpts were from "A 21st Century Vision for Waukegan's Downtown and Lakefront—Downtown Master Plan Summary Report July 2003":

The Waukegan Lakefront and Downtown Master Plan represents the culmination of extensive work by City of Waukegan staff and elected officials and the New Harbor City Renaissance Commission. The latter body served as the steering committee for the Master Plan. Waukegan's citizens also helped prepare the Master Plan through a series of town hall meetings held between January and August of 2003. The report highlights the major findings, ideas and recommendations of the Master Plan. It is intended for use by City departments, other public agencies, the development community and the residents of Waukegan as a vision for the future and a guide to action. The summary addresses Waukegan's place in the region. Access, open space and development recommendations are offered. The report then addresses key places in turn: the Downtown, the South Lakefront, the Harborfront, the North Harbor and the North Lakefront.

The Plan was built on the following guiding principles:

1. Emphasize Mixed-Use Transit-Oriented Development in the Downtown and the Harborfront
2. Create Strong Pedestrian, Transit and Roadway connections between Downtown and the Lakefront
3. Protect, Restore and Enhance Waukegan's Ravine and Park System
4. Restore the Lakefront into a Regional Environmental and Recreational Asset
5. Create a Transportation Framework that Allows Clear Access to the Lakefront
6. Encourage Harbor-Related Uses that Complement an Environmentally Based Lakefront

The Plan identified many concepts and specific objectives that are deemed consistent with ICMP policies and management considerations. The following are examples:

Promote Waukegan's lakefront as a regional ecological asset, a maritime asset, and as a major regional recreational amenity. The Waukegan lakefront adjoins one of the state's finest ecosystems, Illinois Beach State Park, and the Waukegan River is a hidden regional treasure that once provided a safe port for passing vessels.

Identify, protect, and enhance lakefront areas of high-quality habitat and ecology by restoring and enhancing pre-settlement ecological and hydrological systems, reconnecting fragmented ecosystems as significant public open-space amenities, and implementing the Waukegan Moorlands, a unifying environmental initiative for the Lakefront. Over the course of Waukegan's settlement and growth, many natural features of the original lakefront landscape have been destroyed or severely compromised by industrial development. Despite the negative effects of industrial activity on Waukegan's lakefront, many valuable ecological systems remain. These include an excellent "foredune" system immediately adjacent to the beach, small remnant plant communities in abandoned sites and wetlands adjacent to roads and

railroads. The Little Dead River is an important hydrological connection between Waukegan's upland areas and Lake Michigan. It has been gradually filled, severely compromising its role as a natural water filter. The Master Plan's proposed Waukegan Moorlands will reconstruct Little Dead River, re-establishing a valuable hydrologic and recreational amenity for the city. It also calls for incorporating the North Shore Sanitary District's overflow into a series of constructed wetlands within the Waukegan Moorlands.

- Re-establish natural waterways and wetlands.
- Implement the "Waukegan Moorlands," an open-space initiative that restores pre-settlement landscapes and hydrologic patterns.
- Establish a permanent, protected, dune zone at the lake edge.
- Establish a fore-dune wetland system that provides plant and animal habitat.

Create recreational connections and ecological links to other open space systems, forest preserves, and city parks within Lake County and a connection to Illinois Beach State Park.

- Connect open spaces to Downtown and new neighborhoods.
- Create connections to the mouth of the Waukegan River.
- Create a pedestrian and bicycle link to Illinois Beach State Park.
- Develop a system of trails and bike paths that allow full access to areas of the North Lakefront.
- Use trails and bikeways to link the newly created Moorlands to adjacent open spaces.
- Provide pedestrian routes and observation points along the beachfront.
- Utilize power line right-of-way to provide recreational access west to the Robert McClory bike trail.
- Create open-space initiatives that link the Moorlands to the lakefront.
- Use the Johns Manville site for recreational uses.
- Create an east-west open-space link at the southern edge of the Midwest Generation site.

Ensure and maximize public access to the Lakefront

- Create continuous public access along the waterfront.
- Improve Greenwood Avenue as an important route to the Lakefront.
- To protect sensitive areas, limit vehicular and pedestrian access.
- Create a network of attractive, landscaped, walkable neighborhood streets to the Lakefront.
- Extend and enhance Pershing Road as a new "Lakeshore Drive" for Waukegan.
- Allow for future roadway connections to North Chicago.
- Provide a continuous lakefront pathway that connects to the Harborfront.
- Mid-block alleys will provide access to residential parking.
- Ensure a continuous public lake edge at the south lakefront.
- Maximize public access to the marina.

Because of access restrictions on the North Shore Sanitary District and Midwest Generation sites, in some instances native plant and animal communities have remained. The Master Plan recommends working with these long-term lakefront partners to establish limited-access easements that reconnect and enhance these existing native systems. Using plants indigenous to Waukegan, enhancing remaining ecological systems, and celebrating the uniqueness of this place, the vision for the North Lakefront will begin to heal Waukegan's unparalleled lakefront landscape.

Create parks that complement their lakefront location, maximize open spaces at the lake edge and provide places for active and passive recreation at the lakefront.

- Create neighborhood parks and playgrounds that define residential identity.

- Create a significant lakefront park that defines the south lakefront district.
- Create a new ecological city park to the north of the North Harbor with a theme of ecological restoration, incorporating bioremediation technologies and opportunities for large-scale environmental art.
- Limit North Lakefront development to primarily recreational uses.
- Incorporate the City of Waukegan water-treatment facility into the open space framework.
- Implement a waterfront promenade for pedestrians.
- Create a great civic open space at the Harborfront that extends to the marina.
- Maintain and enhance Waukegan's beaches.

(Source: http://www.waukeganvision.com/pdf/WAUKbook.pdf)

Existing Committees

Waukegan City Council

The Waukegan City Council maintains both a leadership and a governing role over activities throughout Waukegan. The City Council has unanimously supported the adoption of Waukegan's Master Plan for the redevelopment of the lakefront and downtown, including its environmental and ecological components. The City Council meets twice monthly, with special meetings scheduled as needed.

Waukegan Renaissance Commission

Authorized by the Waukegan City Council, the Waukegan Renaissance Commission oversees the implementation of Waukegan's Master Plan for the redevelopment of the downtown and lakefront. Its members are appointed by the Mayor of Waukegan. The Renaissance Commission studies all activities taking place within the redevelopment area boundaries and makes appropriate recommendations to the City Council. Meetings are held once each month, with additional meetings scheduled as necessary.

Waukegan Community Council

The Waukegan Community Council was formed as an offshoot of the Waukegan Renaissance Commission as a volunteer group of citizens interested in Waukegan's redevelopment and willing to actively promote Waukegan. The Waukegan Community Council holds public meetings three times per year, or more often as appropriate, to communicate information about development and other activities and efforts in the Waukegan community and to solicit feedback from the public. Waukegan Community Council meetings are an open forum for discussion and information sharing and feature expert speakers on chosen topics. Members of the Community Council also serve as community ambassadors who actively seek to share the good news about all of the exciting things that are happening in Waukegan.

Waukegan Harbor Citizens Advisory Group (CAG)

The Waukegan Harbor Citizens Advisory Group was organized in August 1990 to help citizens and business leaders concerned about the harbor environment develop plans to identify and clean up contaminated harbor properties. They formed a partnership with the IEPA to develop a two-part plan, the Waukegan Harbor Remedial Action Plan, detailing use impairments and how these impairments could be restored through a cooperative effort. In July 1999, the Stage III Report 3 was completed. This report is the most complete compendium and analysis of monitoring information for Waukegan Harbor and the Waukegan River Watershed area. The CAG is composed of business, fishing, recreation, environmental, government, and other interested groups and individuals. CAG meetings provide a public forum for representatives from business, education, government, industry, environment, civic and recreation interests and the local citizenry to present and discuss their needs and concerns related to the decision-making process at the Waukegan Harbor AOC. In late October 1998, the Waukegan Harbor CAG was presented the State of the Lakes Ecosystem Conference "Success Story" award for their efforts to restore Waukegan Harbor's beneficial uses.

Additional References

This unique study area includes the Waukegan Harbor and the two branches of the Waukegan River that flow into Lake Michigan south of the harbor. It includes the North Branch west to Yeoman Park and the South Branch west to Lincoln Street. The Waukegan AOC is located in Lake County. There is also an Expanded Study Area (ESA) bounded by Dead River on the north, a bluff line that parallels Sheridan Road on the west, the southern boundary of the former U.S. Steel Property on the south, and the nearshore waters of Lake Michigan on the east. The ESA was added to explore additional concerns of the citizens beyond the AOC. A natural inlet and portions of adjacent wetlands were filled to form the present shape of the harbor. Waukegan Harbor consists of approximately 1.2 km^2 of industrial, commercial, municipal and open/vacant lands (for Waukegan Harbor AOC Boundary Map go to website at http://www.epa.gov/glnpo/aoc/waukegan.html). The watershed of the Waukegan ESA contains the Waukegan River drainage basin, the North Ditch drainage basin and other nearshore areas that drain to Lake Michigan. (Source: http://glc.org/monitoring/lakemich/pdf/waukegan.PDF)

"Restoring Habitat in a Great Lakes Urban Watershed" Joel Brammeier, Lake Michigan Federation (Source: http://www.estuaries.org/assets/documents/docs/t5b1.pdf)

In 2002, the Lake Michigan Federation (now the Alliance for the Great Lakes) launched its Urban Aquatic Habitat Initiative to encourage the restoration of fish and wildlife habitat back to the Chicago region's coastal environment. This initiative aims to combat the myth that urban Great Lakes coastal areas are unable to support quality habitat for fish and wildlife.

The Federation's program stems from the Chicago Wilderness Biodiversity Recovery Plan. Chicago Wilderness consists of agency, academic and Non-governmental organization (NGO) members. Its 200,000 acres in three states comprise a regional nature reserve that serves as the area's biodiversity reservoir. This plan guides the work of coalition members by setting biodiversity recovery goals for specific ecosystems and designating key methods to reach these goals. It was awarded national honors in 2001 by the American Planning Association. The Alliance's work under this program seeks to better establish goals for the Lake Michigan nearshore and encourage attainment of those goals through local projects.

We will provide a case study from the City of Waukegan, where the Federation is working with a local group and the Waukegan Park District to repair past damage to its ravine system. The city's ravine landscape gathers water into small streams that eventually channel into the Waukegan River. The river is one of only three that naturally flow into Lake Michigan from Illinois. This narrow waterway is deep enough to provide habitat for lake fish.

Many of the city's parks contain wetlands that have historically fed the Waukegan River, but some have been filled to create parkland. The Waukegan Park District is working in several locations to remove this fill and restore natural wetland function. These wetland restorations have been encouraged through a cooperative process involving state, county, and local agencies and community groups. Heavy labor is being performed by outside contractors while NGOs develop a volunteer corps for light planting and long-term wetland maintenance.

Full restoration of the habitats within the park system will require continued wetland restoration and removal of the construction that has obscured and channelized the river. Success will be dependent upon funding and community dedication to the process. The Federation is working to enhance community involvement and emphasize the need to conserve the unique Waukegan River.